

## **REMARKS**

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1, 10, 20, and 34 are amended. Claims 31-33 are canceled without prejudice. Claims 1-30 and 34-37 are pending in this application.

### **35 U.S.C. § 101**

Claims 1-9 stand rejected under 35 U.S.C. §101. As part of this Response, independent claim 1 has been amended to clarify that the claims are directed to statutory subject matter. Applicant respectfully submits that claims 1-9 comply with 35 U.S.C. §101.

Applicant respectfully requests that the §101 rejections be withdrawn.

### **Double Patenting**

Claim 31 was identified in the December 3, 2004 Office Action as conflicting with claims 1 and 19 of Application No. 09/845,751. In order to expedite prosecution of the present application, claim 31 and its dependent claims 32-33 have been canceled without prejudice.

### **35 U.S.C. § 102**

Claims 1-9 and 20-37 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,410,646 to Tondevold et al. (hereinafter "Tondevold"). Claims 31-33 have been canceled without prejudice, thereby

rendering the rejection of claims 31-33 moot. Applicant respectfully submits that claims 1-9, 20-30, and 34-37 are not anticipated by Tondevold.

Tondevold is directed to a system and method for creating, processing, and storing forms electronically (see, col. 1, lines 10-17). In Tondevold, a computer comprises a central processing unit, a display device, an input device, and an addressable memory (see, col. 3, lines 38-40). The processing unit displays images of blank forms on the display device, the blank forms including several fields and their respective labels (see, col. 4, lines 8-12). A database of form definitions is used as the source for the information and the format for the image displayed (see, col. 4, lines 29-31). The form definition specifies the form type, the number of fields, the label for each field, the data type for each field, the protection level for each field, and any interdependencies between the fields (see, col. 4, lines 31-34). The system also uses protection levels to modify the display depending on the user's identity and the protection level for the field (see, col. 5, lines 1-4). For example, a field may be designated in the form definition to be hidden from view for the district manager while displayed and modifiable for the area manager (see, col. 5, lines 9-12).

In contrast, amended claim 1 recites:

A method implemented in a computer, the method comprising:

receiving an indication of a desired form to be used for data input;

automatically identifying one or more data input fields to be included on the form; and

generating a form definition including the automatically identified one or more data input fields.

Applicant respectfully submits that no such receiving, identifying, and generating is disclosed in Tondevold.

As discussed above, Tondevold discloses a database of form definitions used as the source for the information and format for the form image displayed, and further discloses that protection levels are used to modify the display. However, this modification of the display of Tondevold is a modification of the form image displayed (different fields can be displayed as the form image based on the user's identity and protection level for the field), not a modification of the form definitions in the database of Tondevold. No discussion or mention is made in Tondevold of modifying the form definition to include automatically identified data fields. Accordingly, Applicant respectfully submits that Tondevold cannot disclose generating a form definition including the automatically identified one or more data input fields as recited in amended claim 1.

For at least these reasons, Applicant respectfully submits that amended claim 1 is allowable over Tondevold.

Given that claims 2-9 depend from amended claim 1, Applicant respectfully submits that claims 2-9 are likewise allowable over Tondevold for at least the reasons discussed above with respect to amended claim 1.

With respect to amended claim 20, Applicant respectfully submits that, similar to the discussion above regarding amended claim 1, Tondevold does not disclose determining one or more attributes that are used by a business logic but not obtained by the business logic elsewhere, and using each of the one or more attributes to define a field of a form definition, the field being used to obtain data input as recited in amended claim 20.

Furthermore, amended claim 20 recites in part:

including validation code in the form definition associated with the defined one or more fields, wherein the validation code, when executed, verifies that data is input to the defined field.

Applicant respectfully submits that Tondevold does not disclose including validation code in the form definition as recited in amended claim 20.

As discussed above, Tondevold discloses a database of form definitions used as the source for the information and format for the form image displayed, and further discloses that protection levels are used to modify the display. However, this modification of the display of Tondevold is a modification of the form image displayed (different fields can be displayed as the form image based on the user's identity and protection level for the field), not a modification of the form definitions in the database of Tondevold. No discussion or mention is made in Tondevold of modifying the form definition based on those protection levels. Accordingly, Applicant respectfully submits that Tondevold cannot disclose determining one or more attributes that are used by a business logic but not obtained by the business logic elsewhere, using each of the one or more attributes to define a field of a form definition, and including validation code in the form definition associated with the defined one or more fields as recited in amended claim 20.

For at least these reasons, Applicant respectfully submits that amended claim 20 is allowable over Tondevold.

Given that claims 21-25 depend from amended claim 20, Applicant respectfully submits that claims 21-25 are likewise allowable over Tondevold for at least the reasons discussed above with respect to amended claim 20.

With respect to claim 26, claim 26 recites:

A system comprising:

a tag library to store validation code that, when included in a form definition and executed from the form definition, verifies that an input to an associated data input field of the form defined by the form definition satisfies one or more restrictions; and

a form processor configured to automatically identify one or more restrictions to be associated with a data input field of the form, and further configured to include, in the form definition, validation code from the tag library to verify that a subsequent input to the data field satisfies the one or more automatically identified restrictions.

Applicant respectfully submits that Tondevold does not disclose a form processor as recited in claim 26.

Tondevold discloses that the processing unit compares the data input to the data type such as numerical, character, calculation or decimal in the form definition for a match before information will be accepted (see, col. 4, lines 61-64). Tondevold also discloses that a field may specify that the input be within a valid range or from within a data base (see, col. 4, lines 64-66), and that the processing unit verifies the correctness of data entered by the user by comparing it to a valid range of values for a particular field (see, col. 7, lines 30-35). As discussed above, Tondevold also discloses that protection levels are used to modify the form image displayed. This modification of the display of Tondevold is a modification of the form image displayed (different fields can be displayed as the form image based on the user's identity and protection level for the field), not a modification of the form definitions in the database of Tondevold.

In contrast, the form processor of claim 26 is configured to include, in the form definition, validation code to verify that a subsequent input to the data field satisfies the one or more automatically identified restrictions. Applicant

respectfully submits that there is no disclosure in Tondevold of a form processor configured to include in a form definition validation code for automatically identified restrictions. As discussed above, Tondevold discusses modification of the form image displayed, not modification of the form definitions in the database of Tondevold. Nowhere in Tondevold is there any discussion or mention of modifying the form definitions in the database based on the protection levels. Accordingly, Applicant respectfully submits that Tondevold cannot disclose a form processor configured to include in a form definition validation code for automatically identified restrictions, as recited in claim 26.

For at least these reasons, Applicant respectfully submits that claim 26 is allowable over Tondevold.

Given that claims 27-30 depend from claim 26, Applicant respectfully submits that claims 27-30 are likewise allowable over Tondevold for at least the reasons discussed above with respect to claim 26.

With respect to amended claim 34, Applicant respectfully submits that, similar to the discussion above regarding amended claim 1, Tondevold does not disclose an execution environment layer via which a form processing module can communicate with the business logic layer, wherein the form processing module obtains, from the business logic layer, an indication of one or more restrictions on data input to a form for a request to be subsequently processed by the business logic layer, and identifies the one or more restrictions in a form definition for the form as recited in amended claim 34. For at least these reasons, Applicant respectfully submits that amended claim 34 is allowable over Tondevold.

Given that claim 35 depends from amended claim 34, Applicant respectfully submits that claim 35 is likewise allowable over Tondevold for at least the reasons discussed above with respect to amended claim 34.

With respect to claim 36, claim 36 recites:

A method comprising:

accessing a business logic to identify one or more interactions associated with the business logic, wherein each interaction is associated with a request and includes one or more command definitions to process the request;

identifying, in the one or more interactions, one or more attributes that are not obtained by the one or more interactions elsewhere; and

indicating that the one or more identified attributes are to be obtained via a data input field on a form, and further indicating that an input for the data input field is needed when submitting the form.

Applicant respectfully submits that Tondevold does not disclose the accessing, identifying, and indicating of claim 36.

In claim 36, the method comprises identifying one or more attributes that are not obtained by the one or more interactions elsewhere, and indicating that the one or more identified attributes are to be obtained via a data input field on a form. In the December 3, 2004 Office Action at ¶8, pp. 11-12, it was asserted that the attributes that are not obtained by the one or more interactions elsewhere of claim 36 is taught by the comparing the input made to the forms with the user's identity, such as an area manger of Tondevold. However, if the comparing the input made to the forms with the user's identity of Tondevold teaches the identifying one or more attributes of claim 36, then following the language of claim 36 Tondevold would have to disclose indicating that the user's identity is to be obtained via a data input field on a form. Although Tondevold, as discussed above, discloses use of protection levels to modify the display depending on the user's identity and the

protection level for the field, such as a field that may be designated in the form definition to be hidden from view for the district manager while displayed and modifiable for the area manager, there is no discussion or mention in Tondevold of indicating that the user's identity is to be obtained via a data input field on a form. Obtaining the user's identity via a data input field on a form of Tondevold would be nonsensical because the fields that are displayed on the form of Tondevold are modified depending on the user's identity, so it would require the form itself to be displayed in Tondevold in order to obtain the information (the user's identity) necessary to determine how to display the form.

For at least these reasons, Applicant respectfully submits that claim 36 is allowable over Tondevold.

Given that claim 37 depends from claim 36, Applicant respectfully submits that claim 37 is likewise allowable over Tondevold for at least the reasons discussed above with respect to claim 36.

Applicant respectfully requests that the §102 rejections be withdrawn.

### **35 U.S.C. § 103**

Claims 10-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tondevold in view of U.S. Patent No. 6,704,906 to Yankovich et al. (hereinafter "Yankovich"). Applicant respectfully submits that claims 10-19 are not obvious over Tondevold in view of Yankovich.

Yankovich is directed to a self-directed routable electronic form system and method (see, Title). As discussed in the Abstract of Yankovich, each user in the process defines the next, or all the subsequent user routing. The invention resides



in providing rules and guidelines that define routing to exist completely within the electronic form itself. Residing in the electronic form these routing rules are dynamically changed based on data input to the form, providing visual clues to the routing based on that input. Yankovich generates in the approvers' view of the form appropriate visual elements corresponding with allowable actions of this subsequent viewer. Yankovich also provides visual clues as to the next routing destination based on the electronics form current fill-in data, or based on any changes the approver makes to fill-in data, all without server interaction. This sequence continues until the electronics "form flow" is complete and an end point is reached.

With respect to amended claim 10, Applicant respectfully submits that, similar to the discussion above regarding amended claim 1, Tondevold does not disclose or suggest automatically identifying one or more restrictions associated with a data input field, and using the one or more restrictions and the field to generate a text markup language form definition as recited in amended claim 10. Yankovich is cited in the December 3, 2004 Office Action as teaching the creation of a form in HTML (see, December 3, 2004 Office Action at ¶ 10, p. 13). Yankovich is not cited as curing, and does not cure, the deficiencies of Tondevold discussed above with respect to amended claim 1. Accordingly, Applicant respectfully submits that amended claim 10 is allowable over Tondevold in view of Yankovich for at least these reasons.

Given that claims 11-19 depend from amended claim 10, Applicant respectfully submits that claims 11-19 are likewise allowable over Tondevold in

view of Yankovich for at least the reasons discussed above with respect to amended claim 10.

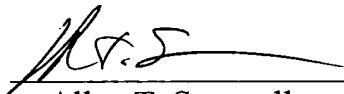
Applicant respectfully requests that the §103 rejections be withdrawn.

**Conclusion**

Claims 1-30 and 34-37 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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